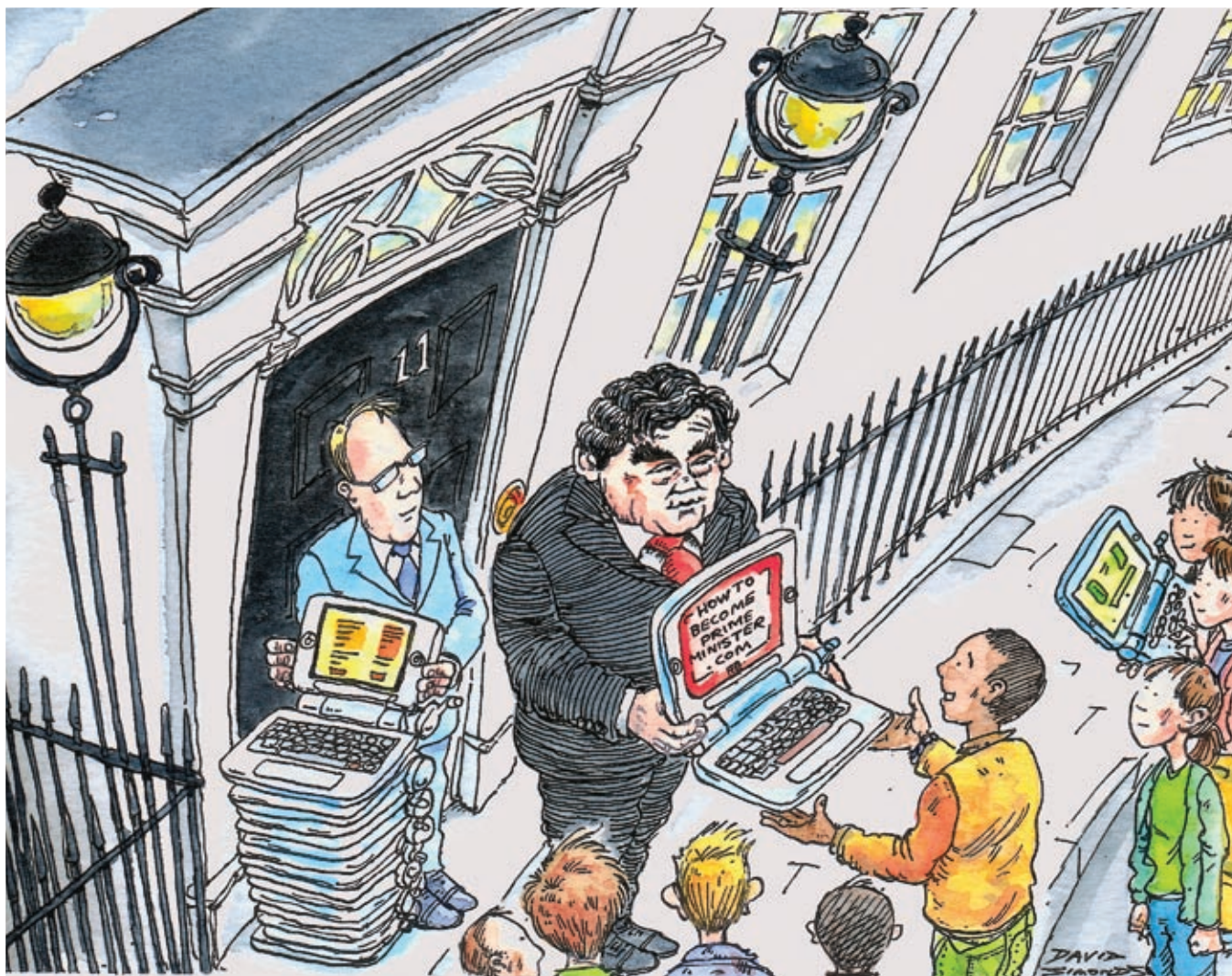




RANTS & RAVES

Mel Croucher urges the government to revolutionise children's education, while Simon Edwards wonders if anti-virus companies' certificates are worth the paper they're written on

CHILDREN IN NEED



MEL CROUCHER RAVES

Education, education, education! How well we all remember that battle cry of Tony Blair, back in the days before lies were the new truth. Even now, Gordon Brown repeats the mantra, and even now I hope against all odds that he means what he says. You see, it has never been easier to carry out an educational revolution because it has never been cheaper. All it will cost is £50 per head, in fact. And the key to the whole thing is the notebook computer.

Up to now, notebooks have been horribly overpriced and ludicrously overspecified. Three-

quarters of their puffed-up software is needed to manage the residual quarter, and the residual quarter performs the same tired old functions in a dozen different ways. But when notebooks go wrong, it's almost impossible to rummage in their entrails and find a remedy, because they are so miniaturised and fragile that only the pixies can fix them. All this has always dictated that notebooks and kids just don't mix. Which is a huge shame, because notebook computers offer a gateway to the world and they act as a channel for thought, action and responsibility.

But now, right now, the government has a golden opportunity to issue children with their own notebook, to have and to hold, for a measly £50. It's all

thanks to the One Laptop Per Child project, headed up by the visionary Nicholas Negroponte, and his computer that has been designed to help children in developing countries. The amazing specification details are as follows.

ALL-TERRAIN

The whole kit and caboodle is housed in a hazard-proof plastic shell, allowing operation in conditions ranging from steaming jungles to wind-swept tundra to arid deserts. There's no hard disk, just a 500MB flash memory. It doesn't use the Windows operating system, but open-source Linux instead. There's a built-in power supply, including a wind-up crank handle, a full-colour display option and large-print mono display

option, and wireless broadband for instant networking with any similar notebook in range. In fact, it can do everything an office model can do, but all the crap has been cut out of it. And before you ask, Microsoft understands the revolutionary implications of such a project, and is already sniffing around to see if it can grab a slice of the action.

I fervently hope Microsoft is rebuffed and is not allowed to stifle such a bold dream by simply buying it up.

You see, the £50 notebook can only be achieved by volume production, with a launch target of five million units minimum, to be ordered by national governments who will distribute the computers to the children of their lands. At the time of writing, the world is just one million units short of the target, with governments as diverse as Brazil, Thailand, Nigeria, Argentina and Libya pledging to buy four million between them.

Come on, Chancellor! Lead the way and stump up for the rest. I know you can find the money. You spend one million pounds every single hour of the day and night to shore up the invasion and occupation of Iraq. Forgo 50 hours



of war and regain respect, admiration and friendship for this country throughout the developing world. Be a real leader, for the sake of the next generation and for the sake of us all. Buy a million notebooks at £50 apiece and make us proud to be educators.

CERTIFIED INSANE



No-one likes taking exams. Imagine that you are sitting at a desk in a dusty, draughty school hall facing a two-hour test. Imagine that your future rests entirely on how well you do. Get a good mark and you stand a chance of employment. Fail, and it's the dole queue. What a horrible situation. I hope you studied hard.

But wait, it's not as bad as it seems because this examination board has some special rules. If you fail you can have a second chance. Not just a chance to retake, mind you. You get an extra special second chance. Pay a load of cash and you can take home the answers. You then have six weeks to memorise them before being allowed to sit the exact same exam for the second time.

I don't know about you, but if I was an employer I'd think twice about picking staff based solely on their passing this exam. Holding such a certificate would be virtually meaningless, showing only that candidates had enough cash to pay for the answers and enough sentence to be able to memorise and repeat them. Yet this is how anti-virus companies earn those smart-looking certificates that they stick on their product boxes.

COASTING ALONG

Have a look at the box for the anti-virus software that you are using now. I bet it displays a certificate called West Coast Labs Checkmark and another called ICSA Labs Certified. If not, it will be on the company website. West Coast Labs and ICSA Labs run independent tests against security software submitted by developers. But what do you know about these tests? Do they mean that you are holding the best anti-virus program available? Or do they simply verify that you are holding some anti-virus software?

There are a few tests that West Coast Labs runs against an anti-virus program. According to the literature on its website, these include two levels of anti-virus test and a test for Trojans. The first anti-virus test checks how well the software detects real viruses from

the wild. These viruses are two months old, which means that the anti-virus companies have had plenty of time to prepare their virus-definition updates. Too much time, some would argue.

The second anti-virus test addresses the program's ability to disinfect files. This disinfection has to be good enough to allow the user to "use as much of the data as possible", but files and documents that have been disinfected do not have to be restored to their exact, original state. Anyone who knows about how viruses work accepts that it's incredibly hard, if not impossible, to disinfect files thoroughly. I'm not criticising West Coast Labs for its methodology here, but you might be interested to know what the industry means when it refers to disinfection.

The most sensible advice anyone can offer when you are faced with an infected file or document is that you should restore it from an uninfected backup. If you continue to use a disinfected file, you may find it is unstable, while documents that use macros may lose some of their functionality once a macro virus has been removed.

TROJAN RECORDS

West Coast Lab's Trojan test uses a special test suite of Trojan files. Who knows what files lurk in this collection? The anti-virus companies do, once they have had their products tested. If their anti-virus software misses any of the Trojans they are sent copies of these bad files, which they can use to generate updates. Six weeks later, after an update, the program will be tested again, with the same Trojans. It is hard to imagine circumstances where an anti-virus product could fail this test.

ICSA Labs is a bit stricter, and continues to test products at least once every three months. If any fail, the developer is given seven days to fix the problem. ICSA Labs does not publish whether or not it passes samples of the viruses to the developers to help them pass the test. It's interesting to note that neither does it test for non-replicating malware. This means that spyware and other threats that do not attempt to spread themselves automatically fall outside the test's remit. It does have a dedicated anti-spyware test but, at the time of writing, ICSA Labs' website reports only one consumer product as having passed. This is Trend Micro PC-cillin Internet Security 2007, which we found to be one of the least-effective products in our Labs test on page 125.

WASTE PAPER

Does this mean that the certificates earned by anti-virus software are fluff, designed to baffle buyers with science? Not entirely. These certificates acknowledge that the software in question works on at least a basic level. After all, a company does need some expertise to be able to put together a working anti-virus program. But the thing that makes one anti-virus program better than another is its continued ability to detect threats quickly and accurately. The certification test results don't really show whether or not the program can do this.

In my humble opinion, the testers should not share their samples. If the anti-virus companies can't detect viruses using their own resources, their service is lacking. A good service is central to creating a useful anti-virus program because, when you buy a box of security software, you are really subscribing to a service. To be any good, this cannot rely on information supplied by testing companies, independent or not, every three or four months. The company has to have a live view of real viruses as they spread across the internet so that it can issue updates fast enough to protect computer users.

Don't get me wrong. Testing anti-virus software properly is not an easy task, and there are lots of different methods you can use. A certificate from an independent lab is better than nothing, but I'd entreat you to view it like a basic hygiene certificate in a takeaway, rather than a rave review from Egon Ronay.

DRIVING VISTA



This month, in an effort to get up to speed with Windows Vista just before its launch, I installed the final version on an old notebook. I say old, but this 1.6GHz Samsung Centrino notebook, with 512GB of RAM, was officially powerful enough for Vista. As it turned out, things sort of worked – in an early Windows XP sort of way.

Removing Windows XP and replacing it with Vista took a couple of hours. Windows Vista ran happily, although without the posh semi-transparent Aero interface that most people seem to think is Vista's main *raison d'être* (it isn't). I say happily, but I really mean that it was grumpily grinding along at a low 800x600 resolution with dead network adaptors. Adding another 1GB of RAM turned the notebook

into something resembling usable; 512MB really isn't enough.

I don't think that the Intel and 3Com network adaptors in a Centrino notebook should be too obscure to be supported by a modern operating system, but mine were not compatible with Vista's built-in drivers. Both the physical and wireless adaptors were unavailable, which rather limited my chances of downloading further updates. A colleague said that he'd heard of Vista's built-in support for Broadcom-based wireless network cards. We dug out three random cards and tried each in turn.

The third one worked, allowing access to a slow ADSL connection over a slower wireless network. Thankfully, Windows Update found compatible network drivers for the built-in Ethernet and wireless adaptors, although there was no joy with the graphics driver. Aero eluded me still, but I was determined to succeed.

RESOLUTION ROCK

Following instinct rather than reason, I downloaded the Windows XP graphics drivers for the notebook's Nvidia chipset and installed them. They worked, and I luxuriated in the native 1,024x786 resolution. A further attempt at Windows Update found basic official Windows Vista graphics drivers that, although reassuring to have, still didn't add Aero support. For that I would need the official Vista drivers for the Nvidia GeForce4 Go chipset. These are not yet available from either Samsung or Nvidia.

In an effort to give you a balanced idea about how easy it is to install Windows Vista, I also borrowed the Gladiator Legion CS2800 PC that we reviewed in *Labs, Shopper* February 2007. This modern desktop PC was far less trouble to Vistarise and all the hardware worked correctly, including the Nvidia GeForce 6100 graphics chipset. It even ran Aero.

If you want to upgrade a reasonably modern desktop PC to run Vista I predict that, unless you have some really weird bits of hardware, you'll find the process pretty easy. It's unlikely that every peripheral will work, though, so think twice before upgrading if you rely on devices such as a scanner. To be sure, follow our advice on page 159 and run Microsoft's Windows Vista Upgrade Advisor (www.microsoft.com/windows/vista/getready/upgradeadvisor), which will indicate how Vista-ready your setup is. It only works on the 32-bit versions of Windows XP and (bizarrely) Vista. ☑